

CASSETTE-TUNER

# KRC-930

## INSTRUCTION MANUAL

KENWOOD CORPORATION

**Take the time to read through this instruction manual.  
Familiarity with installation and operation procedures  
will help you obtain the best performance from your  
new cassette-tuner.**

### **For your records**

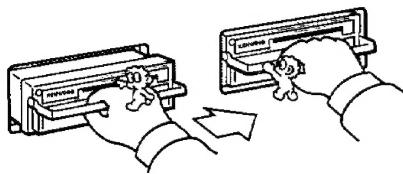
Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your KENWOOD dealer for information or service on this product.

Model KRC-930      Serial number \_\_\_\_\_

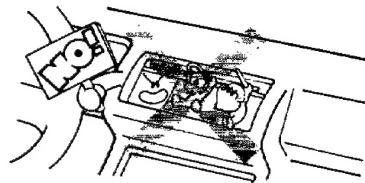
# **WARNING**

TO PREVENT ELECTRIC SHOCK,  
FIRE AND OTHER INJURY.  
PLEASE NOTE THE  
FOLLOWINGS:

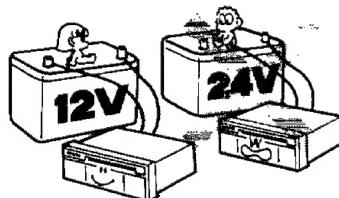
- Secure the locks on the detachable case.



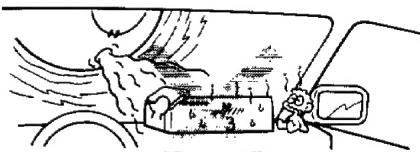
- Do not drop pieces of metal, needles, coins and other electrically conductive materials into the unit.



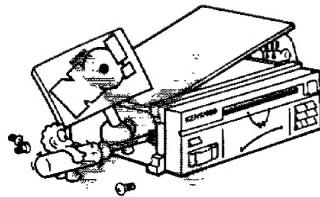
- The unit is designed to be connected 12 V DC and negative grounding.



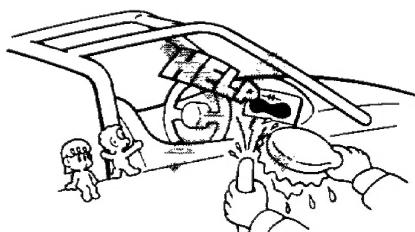
- Do not place the unit, where it will be exposed to direct sunlight or close to heating device.



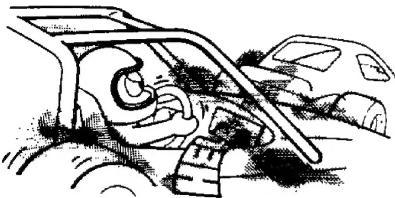
- Do not open enclosure, such as front panel, top or bottom cover.



- Do not dash water on the unit.



- Do not place the unit in areas of excessive dust, high humidity or on unstable surfaces.

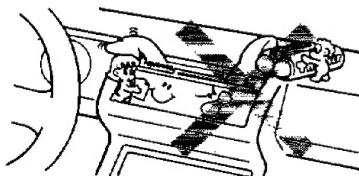


- If an abnormal smell or smoke is detected, immediately turn the power off.



## CLEANING

1. Turn the power off, before cleaning the unit.
2. Do not use any type of abrasive pad, thinner; benzine and any such kind of objects.
3. Wipe the front panel and other exterior surfaces of the unit with a soft dry cloth or a soft cloth lightly moistened with a neutral detergent.



- If you have difficulty in installing the set in your car, please contact your KENWOOD dealer.

## FCC WARNING:

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

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"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

# POWER AND LOUDNESS

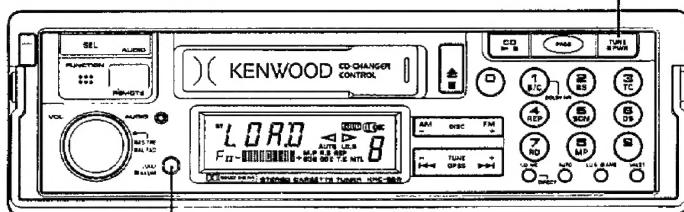
## POWER ON/OFF

Press the Power switch.  
(The power goes ON.)

Press the Power switch for more  
than 1 second.  
(The power goes OFF.)

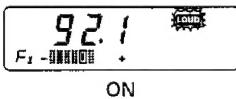
## ALL MODE STAND-BY

Tap the Power switch.  
(The power remains in the ON  
condition and Wait For Operation  
of each mode state.)



## LOUDNESS SWITCH

When listening at low volume  
levels, tapping this switch will  
activate the loudness circuit which  
will compensate for the human  
ear's decreased response.



1. When turning the Power switch ON, operation begins from the Tuner mode.

2. Explain how to operate hereafter with the power ON.
3. When a telephone call is received while the phone interface lead of the detachable case ① is connected, it will be displayed as "CALL" and the equipment will go into ALL MODE STAND-BY condition. When canceling ALL MODE STAND-BY, each mode has to be operated.

This function will not be in operation for the initial 10 seconds of the ignition key switch being switched ON.



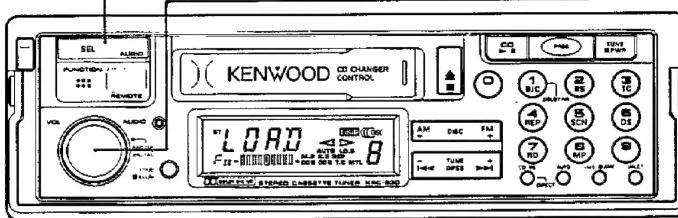
# AUDIO CONTROL

1

Pressing the Audio switch will enable the audio control. Unless it is pressed, Volume and it becomes possible to adjust in the order of Bass, Treble, Balance and Fader and back to Volume if pressed every time.

2

Adjustment will be made by the Audio controller respectively. For operations and display, refer to the following table.



Display	Turn counterclockwise	Turn clockwise
Adjust the Volume  Decreases      Increases	Volume decreases.	Volume increases.
Adjust the Bass response  Decreases      Flat      Increases	Bass decreases.	Bass increases.
Adjust the Treble response  Decreases      Flat      Increases	Treble decreases.	Treble increases.
Adjust the Balance of the right and left channels  Left speakers are emphasized.      Right speakers are emphasized.	The left sound will be emphasized.	The right sound will be emphasized.
Adjust the Balance of the front and rear speakers  Front speakers are emphasized.      Rear speakers are emphasized.	The front sound will be emphasized.	The rear sound will be emphasized.

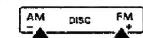


- The player will return to volume control function when more than 5 seconds elapses after pressing the Audio switch or the Audio controller, or by pressing the Audio switch for more than 1 second.

# SEEK TUNING

1

Select the desired Band.



Press AM

Press FM1 or FM2

92.1

FM1

92.1

FM2

53.0

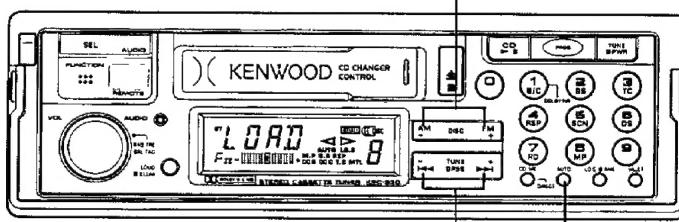
AM

2

Turn the Auto switch ON.

92.1

ON



3

Press Seek switch.

(Seek starts and receives a broadcast station.)



Down Seek

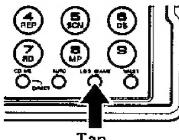
Up Seek

Lit when stereo broadcast is received.

92.1

Indicates reception frequency.

## <Local tuning>



Tap

92.1

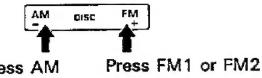
ON

- If the Local switch is turned ON during SEEK TUNING and AUTO MEMORY, it will stop at stations only with satisfactory reception conditions.

# MANUAL TUNING

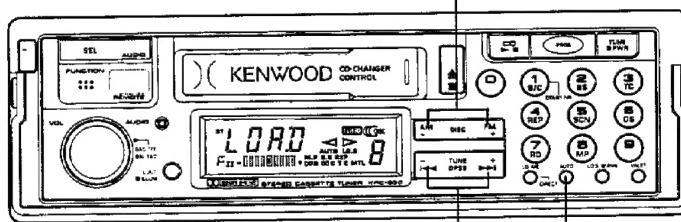
1

Select the desired Band.



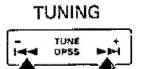
2

Turn the Auto switch OFF.



3

Press to select the desired frequency.



For lower frequencies

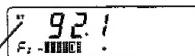
For higher frequencies

(Continued pressing will change it continuously.)

4

Indicates the frequency being received.

Lit when stereo broadcast is received.



Indicates reception frequency

# DIRECT ACCESS TUNING

1

Select the desired Band.

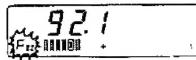


Press AM

Press FM1 or FM2



FM1



FM2



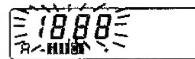
AM

2

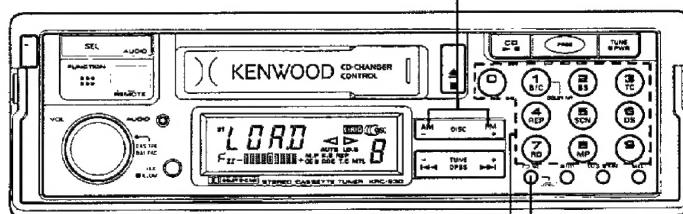
Press the Direct tuning switch.  
Each will blink and display for  
about 10 seconds as below.



FM



AM



3

While the frequency display is  
blinking, input the frequency  
number with the Preset station  
switches.

Example: To tune to FM 87.9 MHz  
Press... (1) / (0) / (0)

Example: To tune to AM 1610 kHz  
Press... (1) / (6) / (1) / (0)



- Numbers other than a receiving frequency cannot be input.

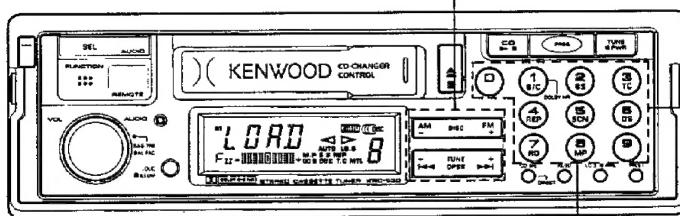
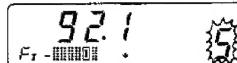
# PRESET STATION TUNING

1

Selects the band and station you wish to preset.

2

Press the Preset station switch you wish to be kept preset for more than 2 seconds.  
(When it is preset, the number of switch pressed will be indicated.)

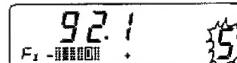


3

By repeating operation of 1 - 2 above, one station can be memorized in one switch each at FM1, FM2, and AM.

4

If tapped, the preset station can be called out.  
(The number of switch pressed will be indicated.)

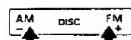


- If preset is to be made anew on the switch already preset, what was preset before will be replaced with what is to be preset.

# AUTO MEMORY

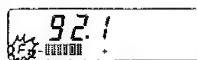
1

Select the desired Band.

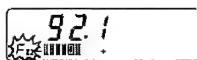


Press AM

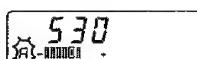
Press FM1 or FM2



FM1



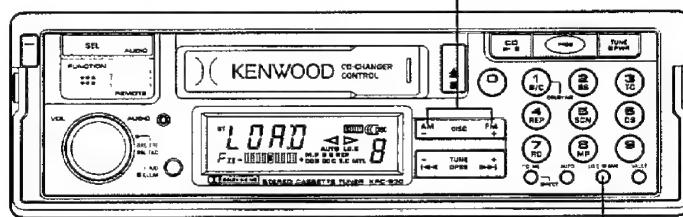
FM2



AM

2

Press the Auto memory switch for more than 2 seconds.



3

The selected band is automatically scanned and 10 stations are memorized. When 10 stations are memorized, the auto memory function is automatically released.

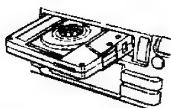
4

The station last stored in memory is received.

# TAPE PLAYBACK

## TAPE PLAYBACK

Insert a cassette tape.  
(Playback starts.)

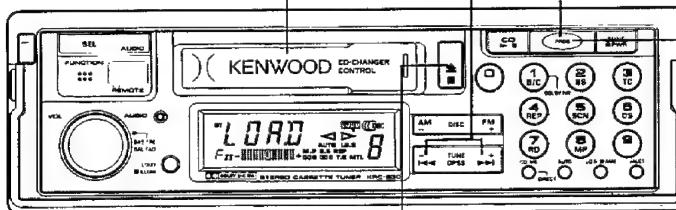


(During playback,  
▷ will be indicated.)

## FAST FORWARD/REWIND

Operation	Press
Fast forward	▶▶ for more than 1 second.
Rewind	◀◀ for more than 1 second.

To release, press the Program switch.



## PROGRAM

When you wish to listen to the reverse side, press the Program switch.  
(The reverse side will be played back.)

## STOP PLAYBACK

Press the Stop/Eject switch.  
(This stops the tape playback.)  
Press the Stop/Eject switch again.  
(The cassette tape will come out.)

### <Playback side>

When inserted with the side A up.

Indicator	Playback side
▷	Side A
◀	Side B

This will be reversed when inserted with the side B up.

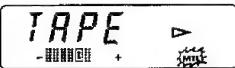
### <How to change the modes>

Present Mode	Destination Mode	Press
Tape	Tuner	Tap the Tuner switch (Tape playback stops)
Tuner, CD Changer	Tape	or A cassette tape should be inserted.

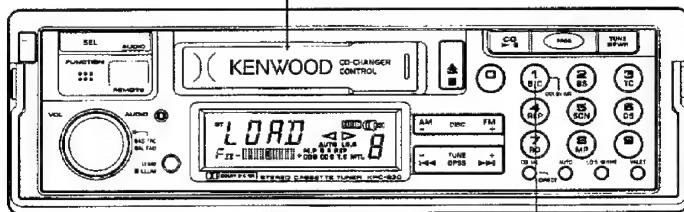
# METAL TAPE AND DOLBY NR

## METAL MODE

When a metal (chrome) tape is inserted, the MTL indicator comes ON, and the equipment is automatically set to the metal (chrome) tape position.



ON  
(Metal/Chrome tape position)



## DOLBY B/C NR

In tape play mode, press Dolby B/C NR switch when playing back a tape recorded with Dolby B/C NR system.

(The modes shift in sequence from Dolby B NR → Dolby C NR → OFF → Dolby B NR each time a switch is pressed.)



Dolby B NR ON



Dolby C NR ON

# DIRECT PROGRAM SEARCH SYSTEM

## 1 BACKWARD SEARCH

During playback of a program, tap the **◀◀** switch for the same number of times as the number of programs to be skipped.

This allows to search a program located in the backward direction of the present program by skipping up to 9 programs. (The number of programs to be skipped is displayed blinking on the program count display.)

Example:

.....When pressed once  
(Searching the beginning of present program)

.....When pressed 4 times  
(Searching the third program before the present program)

## 1 FORWARD SEARCH

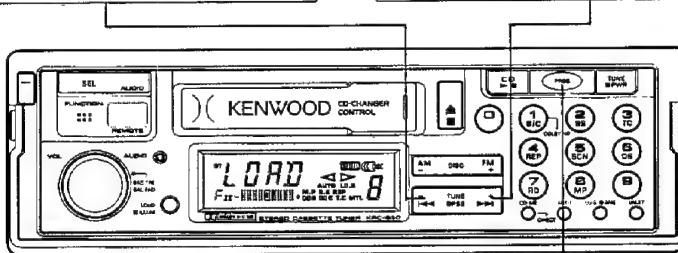
During playback of a program, tap the **▶▶** switch for the same number of times as the number of programs to be skipped.

This allows to search a program located in the forward direction of the present program by skipping up to 9 programs. (The number of programs to be skipped is displayed blinking on the program count display.)

Example:

.....When pressed once  
(Searching the beginning of the next program)

.....When pressed 5 times  
(Searching the fifth program after the present program)



## 2

The rewind or fast forward operation is released when the beginning of the program selected in step 1 is detected, and tape playback starts from that position.

## TO RELEASE

Press the Program switch to release the Direct Program Search in the middle.

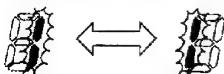
- Please note that in case of the following tapes, sometimes the Direct program search system does not function properly.
  1. When an interval between the music is less than 5 seconds.
  2. When a recorded portion of the low sound volume continues for more than 5 seconds.
- Depending on recording conditions, a search may not be conducted to the beginning of the musical track being played when initiated at an early part of the track.



# INDEX SCAN

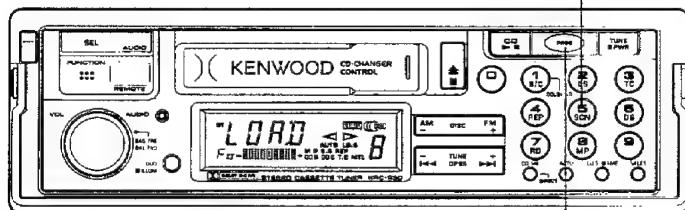
1

Press the Index scan switch.  
(While in the Index scan mode, the  
below indication is repeated.)



2

Tape is fast forwarded until the  
beginning of the next program is  
searched.



3

After the beginning of the searched  
program is played, the tape is fast  
forwarded again, and repeats the  
same operations for other  
programs on tape.

4

When the beginning of a desired  
program starts to be played, press  
the Program switch.  
(Index scan is released and normal  
tape playback starts.)



- Please note that in case of the following tapes, sometimes the Index scan does not function properly.
  1. When an interval between the music is less than 5 seconds.
  2. When a recorded portion of the low sound volume continues for more than 5 seconds.

# REPEAT PLAY

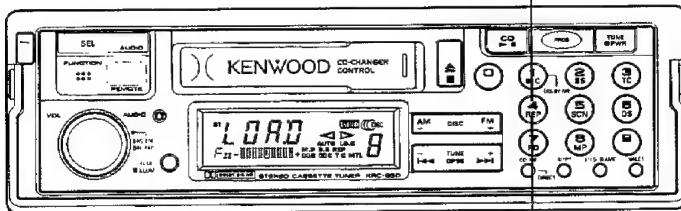
1

Press the Repeat switch at the track you wish to listen to repeatedly.



2

After the track being played is over, automatic rewind begins to the beginning of the track selected for repeat play, and the track starts to play again.



TO RELEASE

Press the Repeat switch again.



- Please note that in case of the following tapes, sometimes the Repeat play does not function properly.
  1. When an interval between the music is less than 5 seconds.
  2. When a recorded portion of the low sound volume continues for more than 5 seconds.

# BLANK SKIP

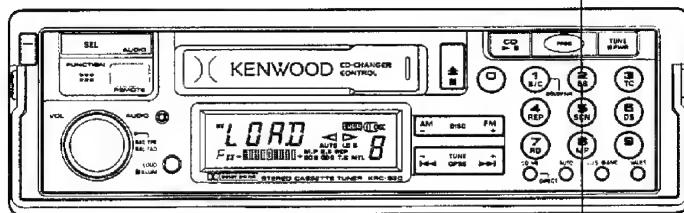
1

Press the Blank skip switch.



2

When a soundless segment of the tape lasts for more than 10 seconds, it will be advanced at high speed to the next track.



TO RELEASE

Press the Blank skip switch again.

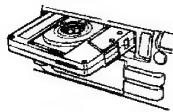
- When the below described recorded tape is used, Blank skip may not function correctly. However, this is not a malfunction.
1. Even when there is more than 10 seconds between tracks, Blank skip may not operate if there is excessive background noise recorded, as this will not be recognized as "soundless."
  2. Blank skip may operate even in the middle of a recorded track, if there is a segment recorded at an extremely low sound level which last for more than 10 seconds. (In this situation, Blank skip should be set to "OFF.")



# TUNER CALL

1

Play back the tape.

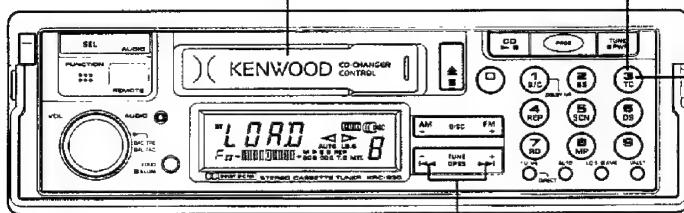


2

Press the Tuner call switch.



ON



3

It will function as a tuner  
automatically during fast forward  
and rewind.

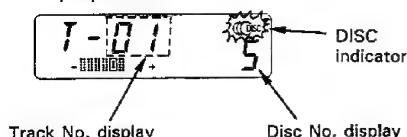
**TO RELEASE**

Press the Tuner call switch again.

# COMPACT DISC PLAY (CD-changer is used)

## COMPACT DISC PLAY

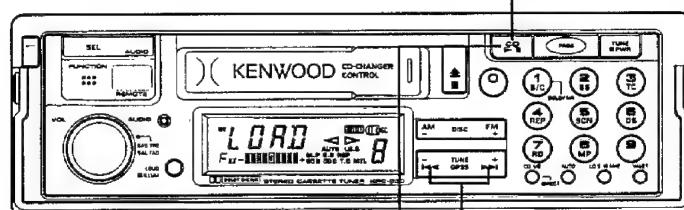
Press the CD (▶ ■) switch.  
(The DISC indicator lights and the  
CD play starts.)



## AHEAD/BACKWARD (at high speed)

Operation	Press
Ahead	▶■ and hold.
Backward	◀■ and hold.

The Ahead/Backward play is released as soon as the finger is removed from the switch.



## TO STOP CD PLAY

Press the CD (▶ ■) switch.  
(The DISC indicator disappears and  
the CD play stops.)

## <How to change the modes>

### At the end of the disc



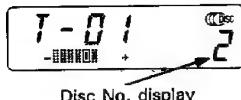
- When disc reaches the end of the last selection of the next disc starts automatically. At the end of the last disc, the unit will go back to the beginning of the first disc, and the play will restart.

Present Mode	Destination Mode	Press
CD-Changer	Tuner	Tap the Tuner switch  (Compact disc play stops)
Tuner, Tape	CD-Changer	

# TRACK/DISC SEARCH (CD-changer is used)

## BACKWARD DISC SEARCH

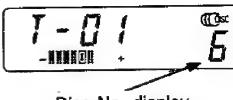
Tap the Disc - switch successively until the Disc No. display shows the desired disc No.



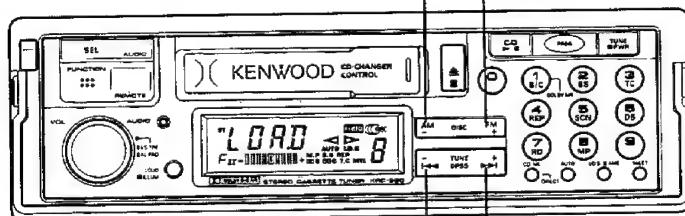
Disc No. display

## FORWARD DISC SEARCH

Tap the Disc + switch successively until the Disc No. display shows the desired disc No.



Disc No. display



## BACKWARD TRACK SEARCH

Tap the  $\blacktriangleleft$  switch successively until the Track No. display shows the desired track No.



Track No. display

## FORWARD TRACK SEARCH

Tap the  $\triangleright$  switch successively until the Track No. display shows the desired track No.



Track No. display

- If Backward Track Search is initiated while track No. 1 is being played, the play position always returns to the beginning of track No. 1 and other tracks cannot be searched.
- If Forward Track Search is initiated while the last track of a disc is being played, no operation takes place.
- The Disc No. display of No. 10 Disc is "0".



# DIRECT TRACK/DISC SEARCH (CD-changer is used)

1

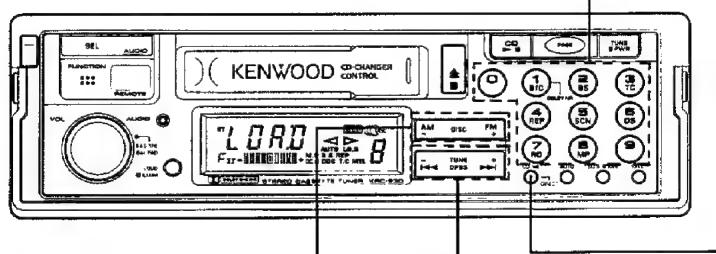
Tap the Direct switch.  
(The Input No. display blinks for 10 seconds.)



Input No. display

2

Enter the desired track No. or disc No. with numeric keys.  
(The Input No. display shows the entered No. blinking.)



3 DISC SEARCH

Press the Disc + or - switch.  
(The CD is played from the beginning of the disc selected in step 2.)

3 TRACK SEARCH

Press the  $\blacktriangleleft$  or  $\triangleright$  switch.  
(The CD is played from the beginning of the track selected in step 2.)

- To release Direct Track/Disc search, do not press any numeric key for 10 seconds, or tap the Direct switch again.
- In case "E-(Number)" appears on the display window, please see page 39.
- Direct Track/Disc Search cannot be initiated during Memory Play, Track Scan or Random Play operation.



# RANDOM PLAY (CD-changer is used)

1

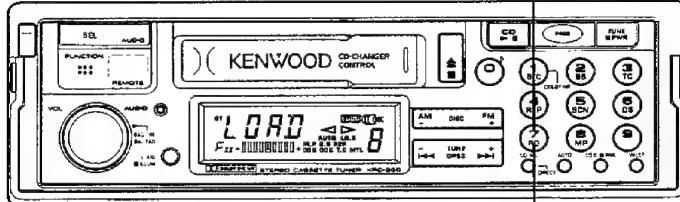
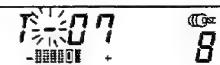
Press the Random switch.  
(The displayed track No. vary one after another.)



During Random Search

2

The tracks in the CD is played in a random order. When all of the tracks in that CD have been played, the next CD is played in a random order.  
("—" of the Track No. display blinks.)



**TO RELEASE**

Press the Random switch again.



- When the Disc magazine is ejected, Random play should be initiated again.

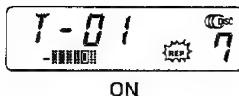


- Pressing the  $\blacktriangleright\blacktriangleright$  switch during Random Play changes the track to the next random selection.

# TRACK REPEAT (CD-changer is used)

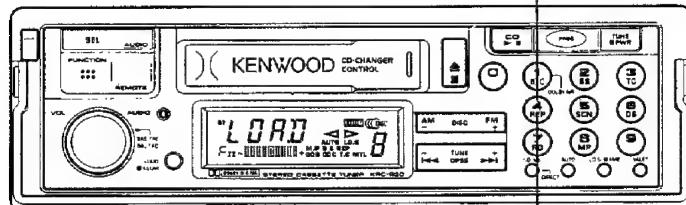
1

Press the Track repeat switch.



2

The track being played is played repeatedly.



**TO RELEASE**

Press the Track repeat switch again.



- When the Disc magazine is eject, Track repeat should be initiated again.



- Ahead/Backward CD Play (at high speed) cannot be initiated during Track Repeat.

# MEMORY PLAY (CD-changer is used)

1

Press and hold the CD memory switch for more than 1 second.  
(The Memory Play No. which can be memorized next is displayed blinking.)

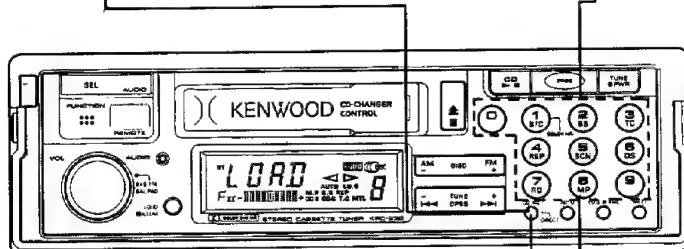


2

Enter the disc No. with a numeric key.  
(The Disc No. display shows the entered disc No.)



**NOTE:** Enter "0" for disc No. 10.



3

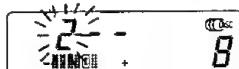
Enter the track No. with numeric keys.  
(The Track No. display shows the entered track No.)



Example: Track No. 2 ... 0 → 2  
Example: Track No. 10 ... 0 → 0

4

Tap the CD memory switch.  
(The content of that memory play No. is memorized and the memorization for the next memory No. gets ready.)



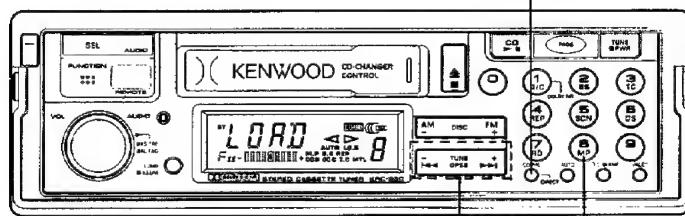
- To change the memory contents, tap the  $\blacktriangleleft$  or  $\triangleright$  switch until the memory No. of the content to be changed is displayed, then perform operations in steps 2 to 4 for that No. To clear the memory content, enter "0 → 0 → 0".
- In case "E-(Number)" appears on the display window, please see page 39.

**5**

Repeat steps 1 to 4 for memorizing up to 20 selections.

**6**

To release the Memory mode, enter no numeric key for 10 seconds or press and hold the CD memory switch for more than 1 second.



## **7 MEMORY PLAY**

Press the Memory play switch.  
(The Memory play starts from the last displayed memory No.)



**8**

Tapping the **►|** switch plays the next memory No., and tapping the **|◀** switch displays the previous memory No. and its content.  
(To release, press the Memory play switch again.)



- When the Disc magazine is ejected, Memory play should be initiated again.
- Direct track/disc search is not possible during Memory Play.

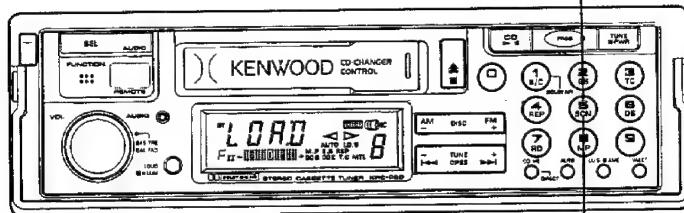
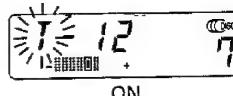
# TRACK SCAN (CD-changer is used)

1

Press the Track scan switch.  
(This initiates Track scan.)

2

The first 10 seconds of all tracks in  
the CDs are played in sequence.  
(“T” of the Track No. display  
blinks.)



3

When the beginning of a desired  
track starts to be played, press the  
Track scan switch.  
(Track scan is released and normal  
CD play starts.)

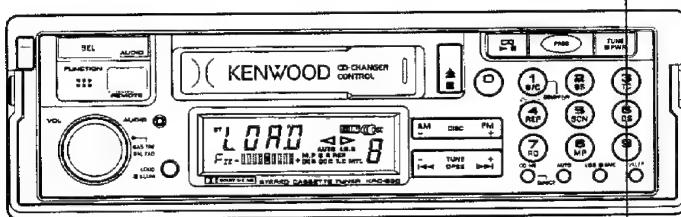
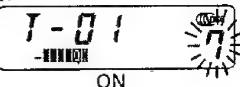
# DISC SCAN (CD-changer is used)

1

Press the Disc scan switch.  
(This initiates Disc scan.)

2

The first 10 seconds of each track  
of the disc will be played one after  
another (while the disc is being  
scanned, the disc number indicator  
flashes).



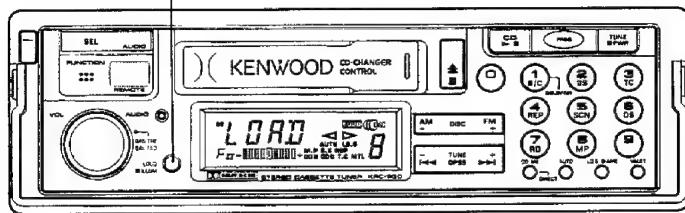
3

Press Disc scan switch for the disc  
required. (Disc scan will be  
canceled and operation will return  
to the normal Disc Play mode.)

# SELECTABLE ILLUMINATION

- Illuminations can be changed to fit the type of car or to suit your own taste.

Every time the illumination switch is pressed for more than 1 second, it will switch over between the colors of green and orange.



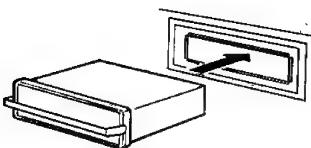
- Keeping connected the Automatic illumination/Dimmer control lead of the Detachable case ①, the illumination become dark synchronized with the car's light.  
Even during the power is OFF, turning ON the car's light control the illumination lights up.

# INSERTION/REMOVAL OF UNIT

## ■ Insert the unit

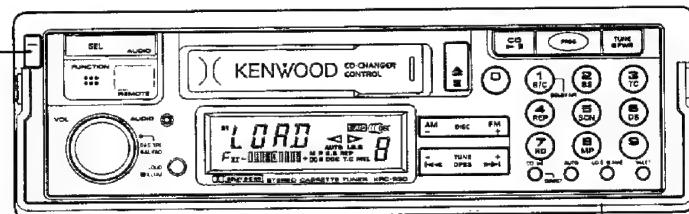
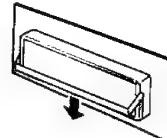
1

Insert the unit into the detachable case.



2

Lower the handle down to the bottom.



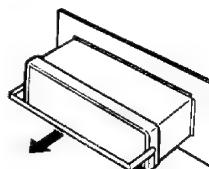
## ■ Remove the unit

1

Press the T.P.C. button.  
Lift the handle.  
(The handle lock is released and power is OFF.)

2

Hold the handle and pull it out.



- Be sure to eject the cassette tape before removing the unit.



- When turning the Power OFF during unit removal, operation will resume from the mode selected at the time the power was turned OFF.



# CODE PROTECTION

- A code number can be registered to prevent misuse.  
It can be set so that the equipment will not operate until the code number registered at the time of Power OFF is re-entered at the time of Power ON.

## ■ Registration of code number.

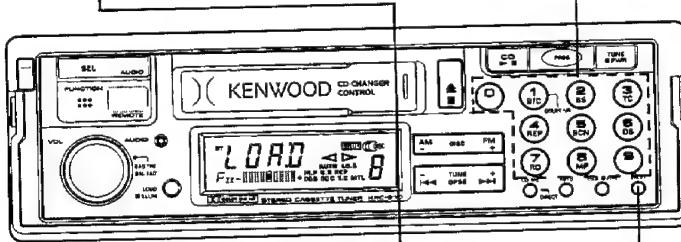
1

Press the Valet switch for more than 1 second.  
(Code indicator flashes.)



2

A code number up to four digits can be entered with the Preset Station switch.  
(The number entered will be shown as a flashing display.)



3

Tap the Valet switch.  
(Power is turned OFF.)

## TO RELEASE

For cancellation of the code number, press the Valet switch for more than 1 second.  
(The player will return to the state it was in before code number registration.)



- Blank and "0" are treated as different codes.  
Example: "1" and "0001"

## ■ Turning the power ON.

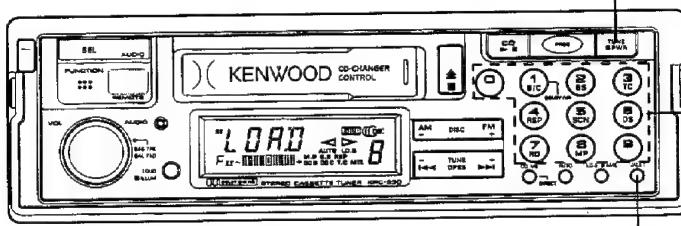
1

Press the Power switch.  
(Code indicator flashes.)



2

Re-enter the code number using  
the Preset Station switch (the  
number entered flashes).



3

Press the Valet switch.  
(Power is turned ON.)



- If each operation is not performed within 10 seconds of pressing the Power switch, the power will be automatically turned OFF.

# CHANNEL SPACE SELECTION

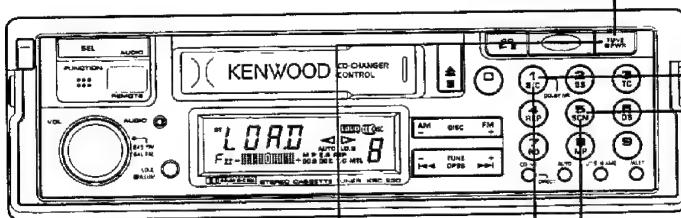
■ The KRC-930 has a channel space select function.  
Two spacing frequencies are available for both FM and AM,  
200 kHz or 50 kHz for FM, and 10 kHz or 9 kHz for AM.

1

Turn the power OFF.

2

Keep on pressing the Preset station switch of "1" and "5"



3

Turn ON the power while engaged  
in the operation of 2.  
(Channel space will turn to 50 kHz  
for FM and 9 kHz for AM.)

4

To bring it back the home position,  
carry out operations of 1-3 again.  
(Channel space returns to 200 kHz  
for FM and 10 kHz for AM.)

- When the channel space is changed, the memorized contents are erased.
- The channel space selection is not used in United States or Canada.

# CARE AND MAINTENANCE

## Notes on handling tape

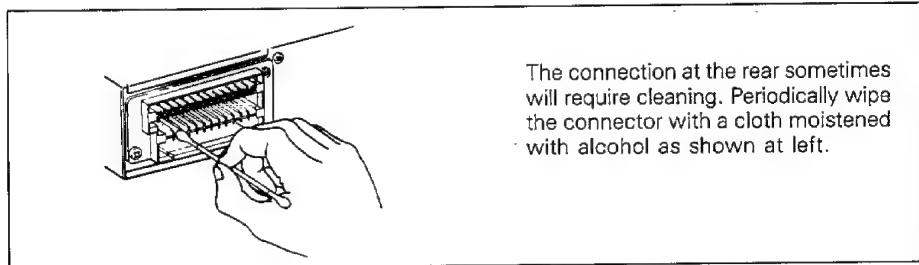
- Before loading a cassette, check the tape for slack. If there is slack tape, remove it using a pencil to turn one of the spools in the cassette shell.
- Do not expose the cassette tape to direct sunlight. Leaving a cassette at high temperature or humidity can deform the cassette shell or tape.
- 120-minute tape is very thin. Avoid its use, because it can easily be twisted around the pinch roller.

## Head cleaning

Magnetic particles from the tape adhere to the head surface after a long period of use, resulting in noise and poor quality sound. Clean the head with cleaning tape available at your KENWOOD dealer. And follow the directions with the head cleaner.

## CAUTION:

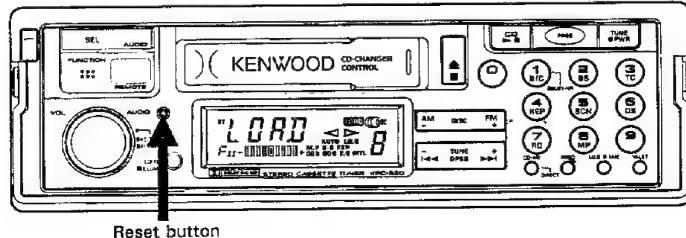
- The KRC-930 includes a lithium backup battery to retain memory in the microprocessor. If the unit can no longer retain its memory, this lithium battery may have been discharged. In this case, bring the unit in to our authorized service center. This backup lithium battery life is estimated at about 7 years.



The connection at the rear sometimes will require cleaning. Periodically wipe the connector with a cloth moistened with alcohol as shown at left.

## If your set malfunctions

- If your set malfunctions or operates abnormally, first press the Reset button. If the malfunction persists, leave the set as it is and please call your KENWOOD dealer.



# ACCESSORIES AND INSTALLATION

## ■ ACCESSORIES

No.	Part name	External View	Number of units
①	Detachable case		1
②	Metal mounting strap		1
③	Hex. bolt (M5 × 20)		1
④	Hex. nut (M5)		2

## ■ INSTALLATION

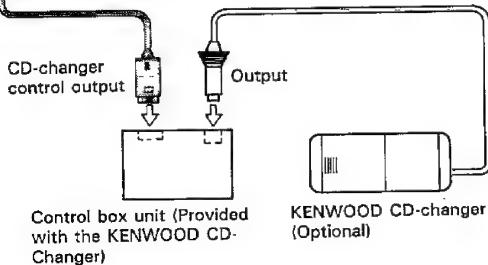
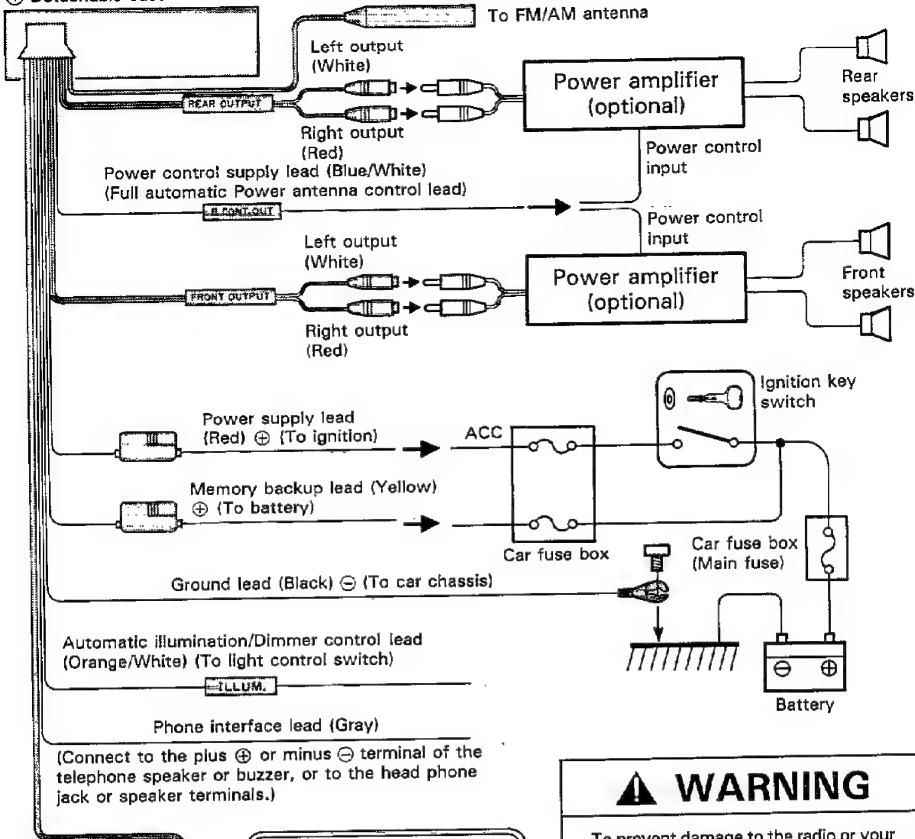
1. Before installation and wiring, remove the  $\ominus$  terminal of the battery to prevent short-circuiting.
2. Connect the input and output cords of the system.
3. Connect the ground to the metal chassis of the car.
4. Connect the memory backup lead (yellow).
5. Connect the power supply lead (red).
6. Install the set and after confirming the installation and wirings are correct, connect the  $\ominus$  terminal of the battery.
7. After installation, surely press the Reset button.



- If a fuse is blown, first check that the associated wires are not short-circuited then replace the fuse with a new one having the same capacity.
- Secure unconnected wires properly so that they do not contact the vehicle chassis.
- Do not remove the caps attached to the unused terminals.

# CONNECTIONS

① Detachable case

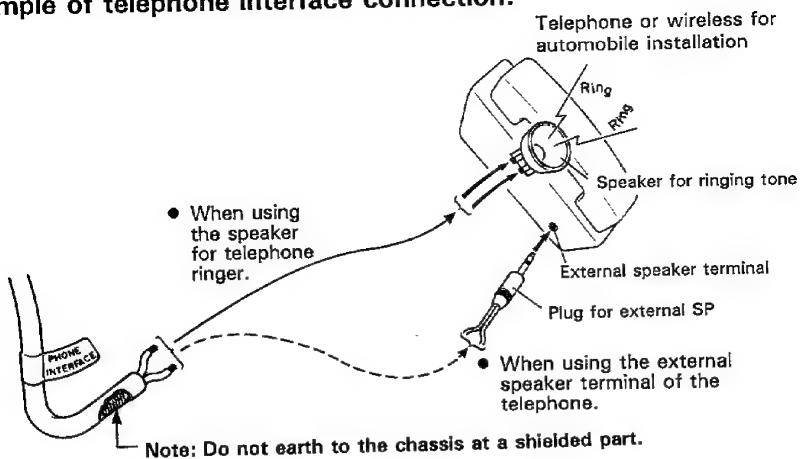


## WARNING

To prevent damage to the radio or your automobile, please make sure that the back up (yellow) and the power supply (red) leads are connected through the car fuse box. This will be an added protection even though the radio is equipped with its own fuse.

# CONNECTIONS

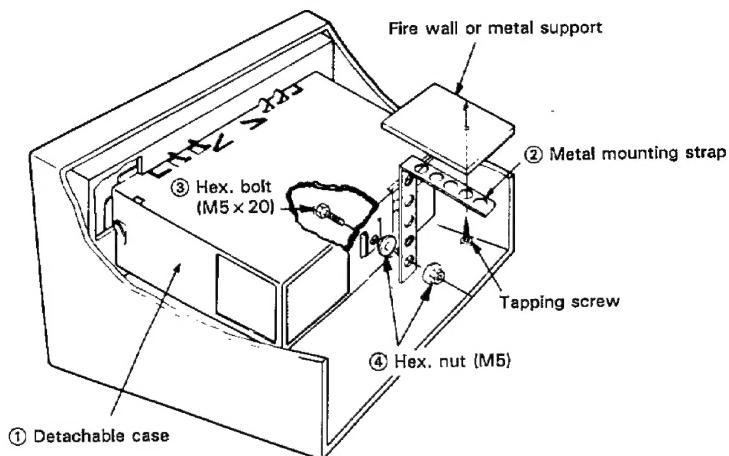
## Example of telephone interface connection.



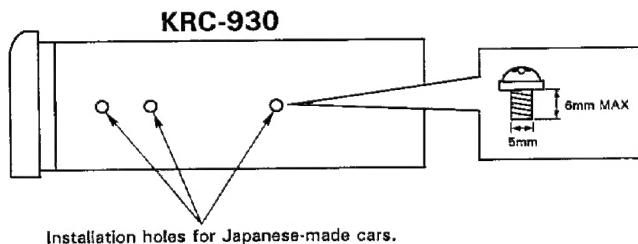
\* When extending a cable, be sure to use a shielded cable.

# INSTALLATION

- Insert the ① Detachable case into the console and clamp with the claws. If the detachable case cannot be inserted, cut off the console with a file.



- Tighten up the TP screw (M5) into the following three holes when installation is made for Japanese-made cars.



Installation holes for Japanese-made cars.



- If an "ELECTRONIC CHASSIS LOCK" (optional) is to be used with this unit, then, buy a "CK-50A".

# TROUBLESHOOTING GUIDE

What often appears to be a malfunction is often due to user error in operation or connection. When trouble occurs with your unit, please check the following before calling for service.

Symptom	Cause	Remedy
No sound one channel	The balance/fader control is extremely rotated to one side.	Adjust the balance/fader control.
Poor reception	The antenna is not extended.	Extend the antenna.
Tonal quality is inferior. Tape creaks.	Head is stained.	Carry out head cleaning.
Operation switches do not function.	Correct operation is not obtained due to a sudden change in the power voltage, etc.	Press the Reset button of the front panel.
Phone interface does not function.	Phone interface lead is not connected correctly.	Connect it correctly according to the connecting method.
Phone interface functions although it is not used. (Displays "CALL" indication).	Conductor is contacting chassis and so on as phone interface lead is clipped or the cap at the tip is off.	Wire in such a way that the conductor of phone interface lead does not contact chassis and so on.

## ■ When the KENWOOD CD-changer is connected:

Symptom	Cause	Remedy
CD play does not start.	Power switch is not turned ON.	Turn the power switch ON, then press the CD (▶■) switch.
The specified disc is not played and the next disc is played.	1. The specified disc is too dirty. 2. The disc is placed upside down. 3. Two discs are set in the same position. 4. The specified disc is placed in a position with a different number. 5. The disc is damaged or scratched seriously.	1. Clean the disc. 2. Eject the magazine and re-insert the disc correctly. 3. Eject the magazine and set each disc correctly. 4. Eject the magazine to check the disc number and the position number, then specify again. 5. Play other discs.
No sound is output while the changer indicator is shown.	1. Volume is set to the minimum level. 2. The incorporated microcomputer is not operating correctly. 3. System connections are made imperfectly (power cord, connection of pre-out jacks, or speaker connections, etc.).	1. Increase the volume level. 2. Press the Reset button of this unit. 3. Check the connections according to the instruction manual. If anything is wrong, reconnect it correctly.
During memory play, a track or disc which has been memorized is not played.	The memorized disc No. and/or track No. does not exist.	Perform memorying again correctly.
Even when the required track is specified, the specified track is not played or the player does not function.	The player is set to random play or memory play.	Release random play or memory play.

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Other than the previous, this unit displays various error indications to show the following messages.

- E-00:** The CD-changer control output is not connected.
- E-01:** No disc magazine in the changer, or the magazine is not set completely.
- E-02:** No discs in the disc magazine.
- E-03:** The specified track is not present on the disc.  
(Example: This appears when the 15th track is specified for a disc on which only 10 tracks are contained.)
- E-04:** Disc is too dirty.  
Condensation has occurred on the disc, or water drops are on the disc.  
Disc is set upside down.
- E-05:** Memory play switch is pressed with no memory.
- E-99:** Operation incorrect due to something being defective.  
Press the Reset button on this unit.  
If the "E-99" indication does not disappear with this operation, consult your nearest KENWOOD Service Agent.
- E-0D:**
  - When the temperature exceeds 60°C, the protection circuit is engaged to stop any operation. At this time, this indication will appear.
  - Open a window or turn the air-conditioner ON to lower the temperature. After a while, this indication will go out.
  - This indication also appears for several seconds when making connections, or when the Reset button is pressed.
- E-0E:** This is displayed when the condition of "E-0D" is released.
- LOAD:** This indication appears while a disc is being changed inside the changer.

CAUTION: Memory play, Random play, Track repeat or Track scan cannot be initiated while the LOAD indication is displayed.

\* When no indicator appears in this unit and only illumination appears, the cable connector may nearly be disconnected.

# SPECIFICATIONS

Specifications subject to change without notice.

## FM Tuner Section

Frequency Range (200 kHz space) .....	87.9 MHz ~ 107.9 MHz
(50 kHz space) .....	87.5 MHz ~ 108.0 MHz
Usable Sensitivity .....	12.0 dBf (1.1 $\mu$ V/75 ohms)
50 dB Quieting Sensitivity .....	15.2 dBf (1.6 $\mu$ V/75 ohms)
Frequency Response ( $\pm 3$ dB) .....	.30 Hz ~ 15 kHz
Signal to Noise Ratio .....	73 dB
Selectivity .....	100 dB
Capture Ratio .....	1.5 dB
Image Response Ratio .....	70 dB
IF Response Ratio .....	120 dB
Stereo Separation (1 kHz) .....	40 dB

## AM Tuner Section

Frequency Range (10 kHz space) .....	530 kHz ~ 1,700 kHz
(9 kHz space) .....	531 kHz ~ 1,611 kHz
Usable Sensitivity .....	28 dB (30 $\mu$ V)

## Cassette Deck Section

Tape Speed .....	4.76 cm/sec
Wow & Flutter .....	0.08% (WRMS)
Fast Winding Time (C-60) .....	100 sec
Frequency Response (120 $\mu$ s) .....	.30 Hz ~ 20 kHz ( $\pm 3$ dB)
(70 $\mu$ s) .....	.30 Hz ~ 21 kHz ( $\pm 3$ dB)
Stereo Separation (1 kHz) .....	43 dB
Signal to Noise Ratio (Dolby NR OFF) .....	58 dB
(Dolby-B NR ON) .....	67 dB
(Dolby-C NR ON) .....	73 dB

## Audio Section

Tone Action .....	Bass: 100 Hz $\pm$ 10 dB Treble: 10 kHz $\pm$ 10 dB
Preout level/load .....	1000 mV (MAX.)/10 kohms

## General

Operating Voltage .....	14.4 V (11 ~ 16 V allowable)
Current Consumption .....	0.8 A at Rated Power
Installation Size (W $\times$ H $\times$ D) .....	182 $\times$ 52 $\times$ 159 mm (7-1/6 $\times$ 2 $\times$ 6-1/4 in.)
Weight .....	1.9 kg (4.1 lb)